UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address; COMMISSIONER FOR PATENTS

P O Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

24197 7590 1205/2008 KLARQUIST SPARKMAN, LLP 121 SW SALMON STREET SUITE 1600

PORTLAND OR 97204

EXAMINER				
WONG, LUT				
ART UNIT	PAPER NUMBER			
2129	•			
DATE MAILED: 12/05/2008				

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/921,993	08/02/2001	David J. Scarborough	5437-60780-01	6882	

TITLE OF INVENTION: DEVELOPMENT OF ELECTRONIC EMPLOYEE SELECTION SYSTEMS AND METHODS

APPLN, TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(8) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	03/05/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION NOT THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

appropriate. All further indicated unless corrects maintenance fee notifica	correspondence includir ed below or directed oth	ng the Patent, advance on nerwise in Block 1, by (a	rders and notification of n i) specifying a new corres	naintenance fees w pondence address;	ill be and/or	mailed to the current (b) indicating a sepa	corresp rate "F	ondence address as EE ADDRESS" for
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)			Note Fee pape	e: A certificate of r s) Transmittal. This ers. Each additional	nailing certif paper	can only be used for icate cannot be used for such as an assignment ling or transmission.	or dome or any nt or fo	stic mailings of the other accompanying ormal drawing, must
24197	7590 12/05	/2008	nave					
121 SW SALMO SUITE 1600		P	I her State addr trans	why certify that this	s Feet	of Mailing or Trans) Transmittal is being ficient postage for fin ISSUE FEE address 1) 273-2885, on the d	denos	ited with the United
PORTLAND, O	K 97204							(Depositor's name)
								(Signature)
								(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR		ATTO	RNEY DOCKET NO.	CON	FIRMATION NO.
09/921,993	08/02/2001		David J. Scarborough		5	437-60780-01		6882
TITLE OF INVENTION	: DEVELOPMENT OF	ELECTRONIC EMPLOY	EE SELECTION SYSTE	MS AND METHOL	os			
APPLN, TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE	PREV. PAID ISSUE FEE			DATE DUE
nonprovisional	NO	\$1510	\$300	\$0		\$1810		03/05/2009
EXAM	IINER	ART UNIT	CLASS-SUBCLASS					
WONG	3, LUT	2129	706-021000					
1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.563). Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. "Fee Address" indication of "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.			(1) the names of up to or agents OR, alternativ (2) the name of a single registered attorney or a	e of a single firm (having as a member a ttorney or agent) and the names of up to patent attorneys or agents. If no name is				
PLEASE NOTE: Uni recordation as set fort (A) NAME OF ASSI	less an assignee is ident h in 37 CFR 3.11. Comp GNEE	ified below, no assignee pletion of this form is NO	THE PATENT (print or typedata will appear on the pat a substitute for filing an and (B) RESIDENCE: (CITY inted on the patent):	atent. If an assigne assignment. and STATE OR C	OUNT	RY)		
4a. The following fee(s) Issue Fee Publication Fee (N	vo small entity discount p		o. Payment of Fee(s): (Plea A check is enclosed. Payment by credit can The Director is hereby overpayment, to Depo	d. Form PTO-2038 authorized to chars	is atta	ched. required fee(s), any de	ficienc	
	s SMALL ENTITY state	is. See 37 CFR 1.27.	☐ b. Applicant is no long					
NOTE: The Issue Fee an interest as shown by the	d Publication Fee (if req records of the United Sta	uired) will not be accepted tes Patent and Trademark	d from anyone other than t Office.	ne applicant; a regis	tered a	ttorney or agent; or th	ne assig	nee or other party in
Authorized Signature				Date				
Typed or printed name				Registration N				
This collection of inform an application. Confiden submitting the complete this form and/or suggesti Box 1450, Alexandria, V Alexandria, Virginia 223	nation is required by 37 C tiality is governed by 35 d application form to the ions for reducing this but 'irginia 22313-1450. DC i13-1450.	CFR 1.311. The informatic U.S.C. 122 and 37 CFR USPTO. Time will vary rden, should be sent to the ONOT SEND FEES OR 6	on is required to obtain or r 1.14. This collection is est depending upon the indiv e Chief Information Office COMPLETED FORMS TO	etain a benefit by th imated to take 12 n idual case. Any coi r, U.S. Patent and D THIS ADDRESS	ie publ ninutes mment Fraden . SENI	ic which is to file (and to complete, including s on the amount of ti- nark Office, U.S. Dep O TO: Commissioner	d by the ng gathe me you artment for Pate	USPTO to process) ering, preparing, and require to complete of Commerce, P.O. ents, P.O. Box 1450,

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE OMB 0651-0033



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

COMMISSIONER FOR PATENTS P O Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.			
09/921,993	08/02/2001	David J. Scarborough	5437-60780-01	6882			
24197 7	24197 7590 12/05/2008			EXAMINER			
KLARQUIST S	PARKMAN, LLP	WONG, LUT					
121 SW SALMON STREET			ART UNIT	PAPER NUMBER			
SUITE 1600 PORTLAND, OR 97204			2129 DATE MAILED: 12/05/2008				

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Application No. Applicant(s) 09/921.993 SCARBOROUGH ET AL. Notice of Allowability Examiner Art Unit 2129 LUT WONG -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable. PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. This communication is responsive to 11-12-2008. The allowed claim(s) is/are 1,2 and 5-12. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). b) ☐ Some* c) ☐ None of the: a) \square All 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. ____ 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). * Certified copies not received: Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) I including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. Notice of References Cited (PTO-892) 5. Notice of Informal Patent Application Notice of Draftperson's Patent Drawing Review (PTO-948) Interview Summary (PTO-413), Paper No./Mail Date Information Disclosure Statements (PTO/SB/08). 7. X Examiner's Amendment/Comment Paper No./Mail Date See Continuation Sheet ☐ Examiner's Comment Regarding Requirement for Deposit 8. X Examiner's Statement of Reasons for Allowance of Biological Material 9. ☐ Other .

/Joseph P. Hirl/ Primary Examiner, Art Unit 2129 $Continuation \ of \ Attachment(s) \ 3. \ Information \ Disclosure \ Statements \ (PTO/SB/08), \ Paper \ No./Mail \ Date: \ 8-19-08, \ 8-21-08, \ 9-15-08.$

Art Unit: 2129

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Gregory Maurer on Sept 24, 2008.

- The application is amended according a proposed amendment entered and faxed by the applicant on Sept 24, 2008. (See attached Examiner's Amendment.pdf)
- Claims 3-4, 13-51 are cancelled. (See interview summary 11/04/2008 and applicant's remark filed 9/24/2008).
 - 3) Claims 1-2, 5-12 are elected and allowed.

Election/Restrictions

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Art Unit: 2129

Allowable Subject Matter

Independent claim 1 is directed to an employee selection method, comprising electronically collecting pre-hire and post-hire information, building a predictive model with information-theoretic feature selection, deploying and fine tuning the model.

The best prior arts found are

- Kirby et al ("An Analysis of Applying Artificial Neural Networks for Employee Selection," AMCIS 1998).
 - 2) Decision Point Data ("1999 StoreWorks! Conference and Exhibition" May 99).
- Scarborough et al ("Information-Theoretic Feature Selection for a Neural Behavioral Model," 2001).
 - 4) Koller et al ("Toward optimal feature selection" 1996).

The following is a statement of reasons for the indication of allowable subject matter:

Kirby teaches the idea of building a Neural Network for employee selection.

Decision Point Data teaches electronically collecting applicant information. The combinations of Kirby and Decision Point Data teach the basic idea of building a predictive model for employee selection. However, the combination fails to teach information-theoretic feature selection.

Scarborough et al, teaches the missing pieces. However, it is applicant's own work and thus not by another (See CFR 1.132 submitted on 9/30/2008).

Koller et al also teaches information theoretic feature selection. However, it is a generic framework.

Art Unit: 2129

While feature selection is well known in the art, information theoretic feature selection (as defined in claim 1 and spec PgPub US2002/0042786A1 [0257]-[[0304]) is not that common. A google scholar (NPL) search of "information-theoretic feature selection" only results in a few hits. However, none of them alone or in combination disclose or suggest the combination of limitations specified in the independent claims.

Independent claim 2, a computer readable medium claim of claim 1, is allowed for the same reason.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LUT WONG whose telephone number is (571)270-1123. The examiner can normally be reached on M-F 7:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vincent David can be reached on (571) 272-3080. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2129

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Lut Wong/ Examiner, Art Unit 2129

/Joseph P. Hirl/ Primary Examiner, Art Unit 2129